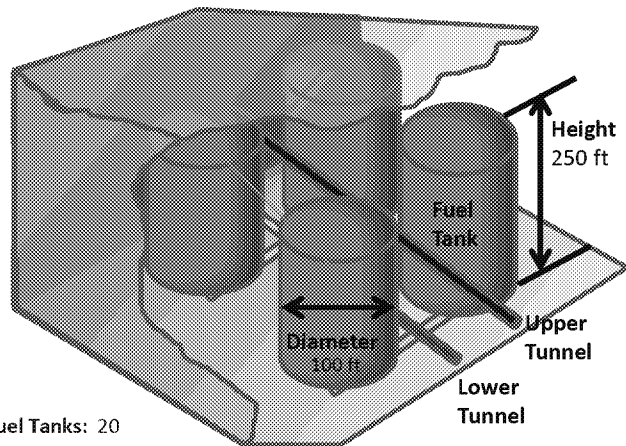


Red Hill Facility

History

- 20 vertical cylindrical tanks (250 feet x 100 feet each)
- "Field-Constructed" underground from 1940 to 1943
- Tank capacity = 12.5 million gallons each
- Welded steel plates backed by 2.5 - 4 feet of reinforced concrete supported by basalt rock
- National Historic Civil Engineering Landmark (1995)
- Located three miles uphill from Pearl Harbor
- Nearest drinking water source approx. 3,000 feet from facility (Navy Red Hill water shaft)



Fuel Tanks: 20

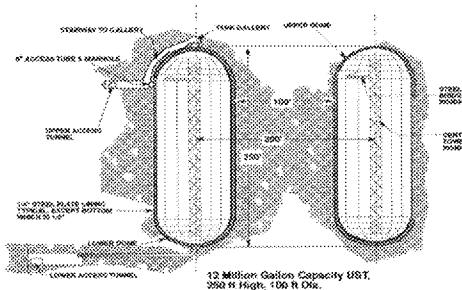
Capacity: 250 million gals

Length of Tunnels: 7.13 miles

Miles From Pearl Harbor to Red Hill Facility: ~3 Miles

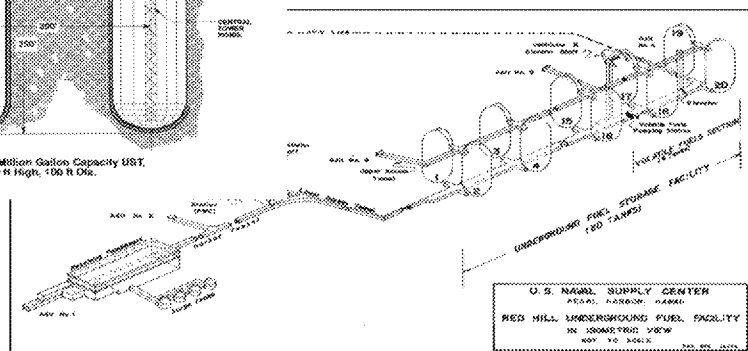
Depth from ground surface to top of tank: 110 to 175 feet

Present Day



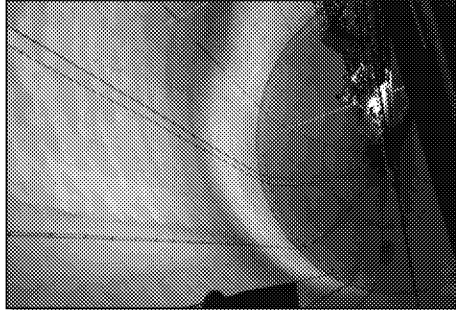
12 Million Gallon Capacity UST, 250 ft High, 100 ft Dia.

- 15 operational tanks, 2 not in service, 3 in maintenance

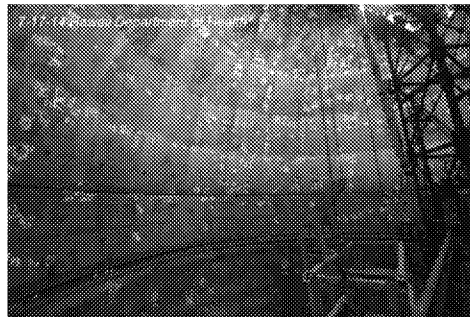


Current Tank Maintenance & Monitoring Practices

Leak Prevention



Interior view looking down into a fuel tank. (U.S. Navy photo)



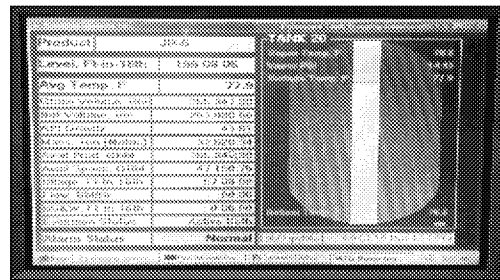
Interior of Tank 5 showing patch plate locations (Hawaii DOH Photo)

- ♦ **Tank Maintenance Procedures – Clean, Inspect and Repair methods based on American Petroleum Institute Method 653**
- ♦ **Conduct biennial tank tightness tests**
- ♦ **Actively monitor fuel levels in real-time by using Automated Fuel Handling Equipment**
- ♦ **Monitor inventory trends and conduct analysis**

Release Detection

- ♦ **Continuous measurement of fuel levels in tanks**
- ♦ **Monthly soil vapor monitoring**
- ♦ **Monthly oil/water interface testing**
- ♦ **Biennial tank tightness test**

Automatic Tank Gauge used to monitor fuel tanks.
(U.S. Navy photo)

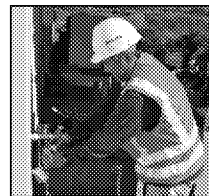


Water Monitoring

Testing/Reporting the Water We Drink

Testing

- Water from the Red Hill Shaft continues to remain safe to drink
- Navy regularly tests drinking water according to the Safe Drinking Water Act requirements and all results are sent to regulatory agencies for review/approval
- Samples are taken by trained personnel from locations approved by State Department of Health (DOH) - Analysis performed by State DOH laboratory or off-island certified laboratories



Water sampling action.
(U.S. Navy photo)



Consumer Confidence Reports

- Navy provides Water Quality Reports annually to consumers in accordance with EPA/DOH requirements
- Regulatory results and additional voluntary testing on the Red Hill Shaft water are included in the 2015 Water Quality Report for Joint Base Pearl Harbor-Hickam Water System
- All constituents requiring testing are below regulatory levels and drinking water remains safe for consumption

Monitoring the Red Hill Facility

